

**KICKER®**  
SOLOXSUBWOOFER

**S10XSP, S12XSP**  
**PAIRASSEMBLY**



**Congratulations on your  
KICKER purchase**

Please record your purchase information and keep your sales receipt for validation of warranty.

Authorized Kicker Dealer: \_\_\_\_\_

Purchase Date: \_\_\_\_\_

SPAIR Model Number: \_\_\_\_\_

The Kicker SoloX subwoofers were specially designed for "Livin' Loud" out in the harsh automotive competition environment. When you push your subwoofers to the extreme, you're bound to find the breaking point, and when you do you can be secure in knowing that Kicker has provided the SPAIR (Simple Pull Apart Insertable Replacement) to replace all of the damaged elements of your Solo X without a lengthy or difficult installation. You can simply remove your old SPAIR, unpack the new SPAIR, reconnect the wires, drop it into the BAM (Basket and Motor Assembly) and screw it back on to get your system back up and kicking in a matter of minutes.

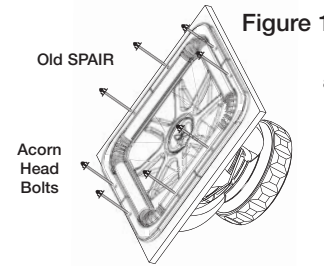
**Performance**

Model:	S10X4/2Ω	S12X4/2Ω
Nominal Impedance [Zn], ohm (2Ω model) [per coil]	4 (2)	4 (2)
Resonance Frequency [fs], Hz (2Ω model)	40.5 (36.237)	37.8 (37.81)
Sensitivity [SPLo], dB @ 1W, 1m (2Ω model)	85.95 (85.65)	87.80 (87.55)
Effective Piston Area [Sd], in <sup>2</sup> (m <sup>2</sup> )	74.4 (.048)	106.8 (.0689)
Power Handling Watts, Peak (RMS)	5000 (2500)	5000 (2500)
Effective Excursion [EXmax <sup>TM</sup> ], in (mm)	.906 (23)	.906 (23)
DC Resistance [Re], ohm (2Ω model) [coils in series]	7.06 (3.99)	7.17 (4.09)
Voice Coil Inductance [Le], mH (2Ω model)	6.600 (5.512)	6.833 (4.654)
Mechanical Q-Factor [Qms] (2Ω model)	9.954 (10.266)	9.441 (10.076)
Electrical Q-Factor [Qes] (2Ω model)	.497 (.393)	.550 (.458)
Total Q-Factor [Qts] (2Ω model)	.474 (.379)	.520 (.438)
Force Factor [BL], Tm (2Ω model)	30.99 (26.7089)	30.60 (27.6444)
Moving Mass [Mms], g (2Ω model)	265.8 (309)	302.6 (361)
Equivalent Volume [Vas], ft <sup>3</sup> (2Ω model)	.702 (.7216)	1.3949 (1.1696)
Equivalent Volume [Vas], L (2Ω model)	19 (20.4376)	39.50 (33.1245)
Net Displacement, in <sup>3</sup> (cc)	311.04 (5100)	328.32 (5380)
Mounting Depth, in (cm)	8 3/8 (21.3)	8 9/16 (21.7)

Note: The use of a subsonic filter will significantly increase the power handling. The power handling specifications in these charts are calculated using a 25Hz (68Hz for the Vented SPL enclosure), 24dB per octave sub-sonic (resonate frequency) filter.

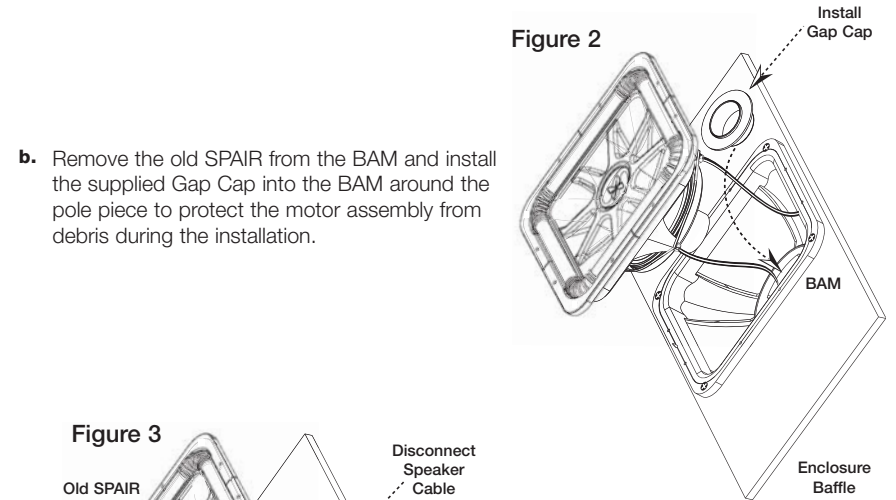
**Installation**

1. To begin installation, start by removing the old SPAIR (Simple Pull Apart Insertable Replacement) from the BAM (Basket and Motor Assembly) as shown below.



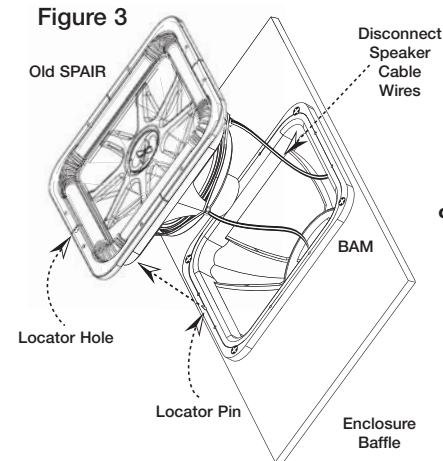
**Figure 1**

- a. Remove the (8) eight acorn head 10-24 bolts securing the old SPAIR to the BAM.



**Figure 2**

- b. Remove the old SPAIR from the BAM and install the supplied Gap Cap into the BAM around the pole piece to protect the motor assembly from debris during the installation.



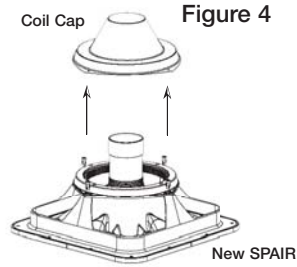
**Figure 3**

- c. Disconnect the speaker wires from the old SPAIR and take note of how they were connected.

**A Note on Power-Handling Capacity** SoloX subwoofers will handle massive amounts of power in any of the recommended enclosures, minimum or maximum. The smaller enclosures are best for use in limited-space applications. The larger recommended enclosures will yield more bass at the resonate frequency of the enclosure. The listed Power Handling capacities assume that both voice coils are in use with the appropriate sub-sonic/resonate frequency filter. Always connect both coils in a dual voice-coil speaker.

2. After carefully removing the new SPAIR from the shipping container, remove the Coil Cap from the new SPAIR assembly.

- a. Carefully remove the Coil Cap from the new SPAIR assembly while avoiding damage to the voice coils.



3. Connect the wiring to the four binding posts on the new SPAIR. Refer to Figure 11 and Figure 12 on the following page and follow the appropriate wiring diagram to achieve the desired ohm load. If your system was properly configured, you will simply reconnect the wires to the voice coils as they were on the old SPAIR.

- a. Connect the speaker cable wires (used to connect the subwoofer to the amplifier) to the new SPAIR's Binding Posts. The Locator Pin and Locator Hole will properly align the SPAIR to the BAM.

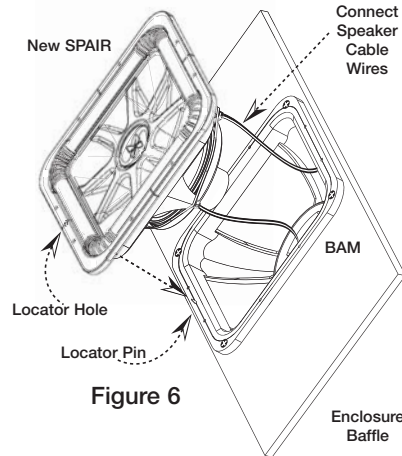


Figure 6

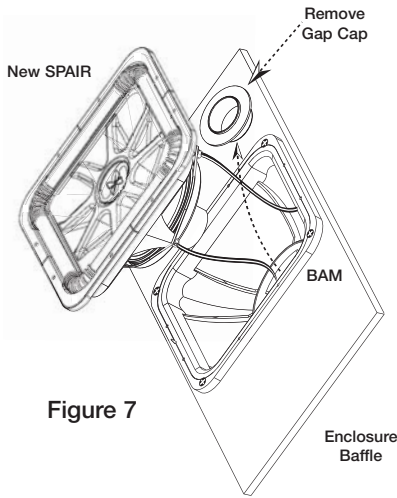


Figure 7

- b. Remove the Gap Cap before inserting the new SPAIR.

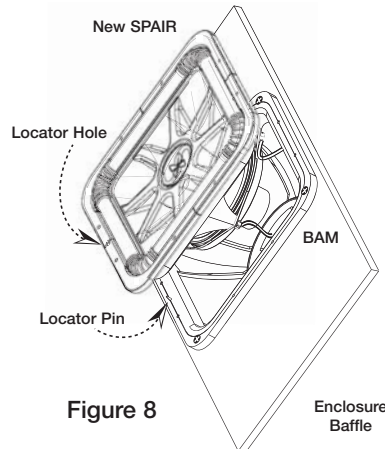


Figure 8

- c. Carefully insert the new SPAIR back into the BAM; do not damage the voice coil. The Locator Pin on the BAM and the Locator Hole in the SPAIR must line up. The ARCTIC (Aluminum Rapid Cooling Thermal Induction Centering) Cap, located on the top of the extended pole piece, will help to center the new SPAIR as you lower it into the BAM. When properly aligned these assemblies easily slide.

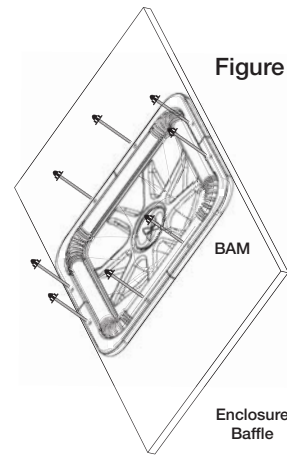


Figure 9

- d. Fit the new SPAIR to the BAM with the 10-24 Acorn Head Bolts. We have enclosed four (4) extra Acorn Head Bolts.

- e. Hand tighten the 10-24 Acorn Head Bolts in the order shown in Figure 10. Then use a wrench or socket driver to securely fasten the bolts. This will ensure a proper fit and alignment.

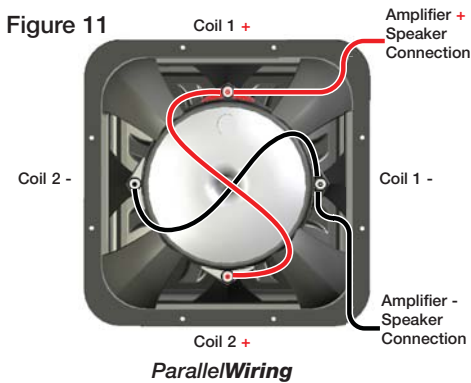
Figure 10



### Wiring Options

SoloX subwoofers are available with dual 4Ω (ohm) or dual 2Ω voice coils. Both coils must be connected to a source of amplification. The dual 4Ω woofer will generate a 2Ω load if the coils are wired in parallel or a 8Ω load in series. The dual 2Ω woofer will provide a 1Ω load wired in parallel or 4Ω load wired in series. The terminals with the white dots are for the first voice coil. The terminals with solid-red and solid-black markings are for the second voice coil. See Figures 1 and 2.

Figure 11



### Parallel Wiring

Dual 4Ω Voice Coils = 2Ω Load  
Dual 2Ω Voice Coils = 1Ω Load

### Series Wiring

Dual 4Ω Voice Coils = 8Ω Load  
Dual 2Ω Voice Coils = 4Ω Load

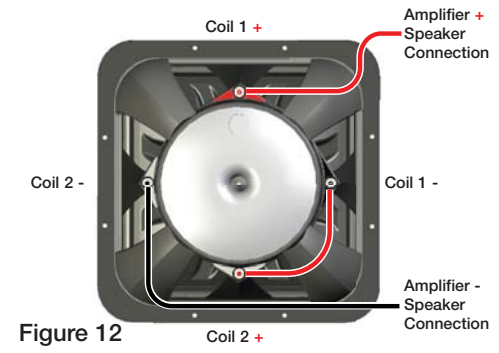


Figure 12

Note: All specifications and performance figures are subject to change. Please visit the [www.kicker.com](http://www.kicker.com) for the most current information. Please allow two weeks of break-in time for the subwoofer to reach optimum performance. To get the best performance from your new Kicker subwoofers, we recommend using genuine Kicker Accessories and Wiring.

Kicker warrants this product to be free from defects in material and workmanship under normal use for a period of THREE (3) MONTHS from date of original purchase with receipt. When purchased from an Authorized KICKER Dealer it is warranted for ONE (1) YEAR from date of original purchase with receipt. In all cases you must have the original receipt. Should service be necessary under this warranty for any reason due to manufacturing defect or malfunction during the warranty period, Kicker will repair or replace (at its discretion) the defective merchandise with equivalent merchandise at no charge. Warranty replacements may have cosmetic scratches and blemishes. Discontinued products may be replaced with more current equivalent products.

This warranty is valid only for the original purchaser and is not extended to owners of the product subsequent to the original purchaser. Any applicable implied warranties are limited in duration to a period of the express warranty as provided herein beginning with the date of the original purchase at retail, and no warranties, whether express or implied, shall apply to this product thereafter. Some states do not allow limitations on implied warranties; therefore these exclusions may not apply to you. This warranty gives you specific legal rights; however you may have other rights that vary from state to state.

#### WHAT TO DO IF YOU NEED WARRANTY OR SERVICE

Defective merchandise should be returned to your local Authorized Stillwater Designs (Kicker) Dealer for warranty service. Assistance in locating an Authorized Dealer can be found at [www.kicker.com](http://www.kicker.com) or by contacting Stillwater Designs directly. You can confirm that a dealer is authorized by asking to see a current authorized dealer window decal.

If it becomes necessary for you to return defective merchandise directly to Stillwater Designs (Kicker), call the Kicker Customer Service Department at (405) 624-8510 for a Return Merchandise Authorization (RMA) number. Package only the defective items in a package that will prevent shipping damage, and return to:

Stillwater Designs, 5021 North Perkins Road, Stillwater, OK 74075

The RMA number must be clearly marked on the outside of the package. Please return only defective components (most likely the SPAIR). The return of functioning items increases your return freight charges. Non-defective items will be returned freight-collect to you. For example, if a subwoofer is defective, only return the defective subwoofer, not the entire enclosure.

Include a copy of the original receipt with the purchase date clearly visible, and a "proof-of-purchase" statement listing the Customer's name, Dealer's name and invoice number, and product purchased. Warranty expiration on items without proof-of-purchase will be determined from the type of sale and manufacturing date code. Freight must be prepaid; items sent freight-collect, or COD, will be refused.

#### WHAT IS NOT COVERED?

This warranty is valid only if the product is used for the purpose for which it was designed.

It does not cover:

- o Burnt voice coils
- o Damage due to improper installation
- o Subsequent damage to other components
- o Damage caused by exposure to moisture, excessive heat, chemical cleaners, and/or UV radiation
- o Damage through negligence, misuse, accident or abuse. Repeated returns for the same damage may be considered abuse
- o Any cost or expense related to the removal or reinstallation of product
- o Speakers damaged due to amplifier clipping or distortion
- o Items previously repaired or modified by any unauthorized repair facility
- o Return shipping on non-defective items
- o Products with tampered or missing barcode labels
- o Products returned without a Return Merchandise Authorization (RMA) number
- o Freight Damage
- o The cost of shipping product to Kicker
- o Service performed by anyone other than Kicker

#### HOW LONG WILL IT TAKE?

Kicker strives to maintain a goal of 24-hour service for all acoustics (subwoofers, midrange drivers, tweeters, crossovers, etc) returns. Delays may be incurred if lack of replacement inventory or parts is encountered.

Failure to follow these steps may void your warranty. Any questions can be directed to the Kicker Customer Service Department at (405) 624-8510. Contact your International Kicker dealer or distributor concerning specific procedures for your country's warranty policies.

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WARNING: KICKER products are capable of producing sound levels that can permanently damage your hearing! Turning up a system to a level that has audible distortion is more damaging to your ears than listening to an undistorted system at the same volume level. The threshold of pain is always an indicator that the sound level is too loud and may permanently damage your hearing. Please use common sense when controlling volume.

#### GARANTÍA INTERNACIONAL *Versión Español*

Comuníquese con su concesionario o distribuidor Kicker internacional para obtener información sobre procedimientos específicos relacionados con las normas de garantía de su país.

ADVERTENCIA: Los excitadores Kicker son capaces de producir niveles de sonido que pueden dañar permanentemente el oído. Subir el volumen del sistema hasta un nivel que produzca distorsión es más dañino para el oído que escuchar un sistema sin distorsión al mismo volumen. El dolor es siempre una indicación de que el sonido es muy fuerte y que puede dañar permanentemente el oído. Sea precavido cuando controle el volumen.

La frase "combustible para vivir la vida Livin' Loud™ a todo volumen" se refiere al entusiasmo por la vida que la marca Kicker de estéreos de automóvil representa y a la recomendación a nuestros clientes de que vivan lo mejor posible ("a todo volumen") en todo sentido. La línea de altavoces y amplificadores Kicker es la mejor del mercado de audio de automóviles y por lo tanto representa el "combustible" para vivir a todo volumen en el área de "estéreos de automóvil" de la vida de nuestros clientes. Recomendamos a todos nuestros clientes que obedezcan todas las reglas y reglamentos locales sobre ruido en cuanto a los niveles legales y apropiados de audición fuera del vehículo.

#### INTERNATIONALE GARANTIE *Deutsche Version*

Nehmen Sie mit Ihren internationalen Kicker-Fachhändler oder Vertrieb Kontakt auf, um Details über die Garantieleistungen in Ihrem Land zu erfahren.

WARNUNG: KICKER-Treiber können einen Schallpegel erzeugen, der zu permanenten Gehörschäden führen kann! Wenn Sie ein System auf einen Pegel stellen, der hörbare Verzerrungen erzeugt, schadet das Ihren Ohren mehr, als ein nicht verzerrtes System auf dem gleichen Lautstärkepegel. Die Schmerzschwelle ist immer eine Anzeige dafür, dass der Schallpegel zu laut ist und zu permanenten Gehörschäden führen kann. Seien Sie bei der Lautstärkeinstellung bitte vernünftig!

Der Slogan "Treibstoff für Livin' Loud" bezieht sich auf die mit den Kicker-Autostereosystemen assoziierte Lebensfreude und die Tatsache, dass wir unsere Kunden ermutigen, in allen Aspekten ihres Lebens nach dem Besten ("Livin' Loud") zu streben. Die Lautsprecher und Verstärker von Kicker sind auf dem Markt für Auto-Soundsysteme führend und stellen somit den "Treibstoff" für das Autostereoelebnis unserer Kunden dar. Wir empfehlen allen unseren Kunden, sich bezüglich der zugelassenen und passenden Lautstärkepegel außerhalb des Autos an die örtlichen Lärmvorschriften zu halten.

#### GARANTIE INTERNATIONALE *Versión Française*

Pour connaître les procédures propres à la politique de garantie de votre pays, contactez votre revendeur ou distributeur International Kicker.

AVERTISSEMENT: Les haut-parleurs Kicker ont la capacité de produire des niveaux sonores pouvant endommager l'ouïe de façon irréversible ! L'augmentation du volume d'un système jusqu'à un niveau présentant une distorsion audible endommage davantage l'ouïe que l'écoute d'un système sans distorsion au même volume. Le seuil de la douleur est toujours le signe que le niveau sonore est trop élevé et risque d'endommager l'ouïe de façon irréversible. Réglez le volume en faisant preuve de bon sens !

L'expression "carburant pour vivre plein pot" fait référence au dynamisme de la marque Kicker d'équipements audio pour véhicules et a pour but d'encourager nos clients à faire le maximum ("vivre plein pot") dans tous les aspects de leur vie. Les haut-parleurs et amplificateurs Kicker sont les meilleurs dans le domaine des équipements audio et représentent donc pour nos clients le "carburant pour vivre plein pot" dans l'aspect "installation audio de véhicule" de leur vie. Nous encourageons tous nos clients à respecter toutes les lois et réglementations locales relatives aux niveaux sonores acceptables à l'extérieur des véhicules.

